

Appl. No. 09/927,006  
Response. Dated December 22, 2004  
Reply to Office Action of September 22, 2004

**• • R E M A R K S / A R G U M E N T S • •**

The Official Action of September 22, 22004 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following comments, are believed to be sufficient to place the application into condition for allowance.

By the present amendment the non-elected claims 9-12 have been canceled without prejudice or disclaimer. Applicants reserve their right to seek patent protection for the canceled and/or deleted subject matter by filing one or more divisional and/or continuation applications during the pendency of the present application.

In addition, the remaining claims have been amended to be limited to only the elected peptide structure. Applicants reserve their right to seek patent protection for the non-elected subject matter by filing one or more divisional and/or continuation applications during the pendency of the present application.

In addition, claims 1, 3, 5 and 7 have been amended to recite a purified peptide or its derivative. Support for this change to the claim can be found in applicants' specification whereat it is discussed that that the peptides are synthesized and purified, purification being a common process for obtaining and isolating pharmaceuticals and biogenetic materials.

In addition, independent claim 1 has been amended to recite that the peptide sequence corresponds to the fourth peptide of peptides of GeneBank LocusID: 4018 which are separated by

Appl. No. 09/927,006  
Response. Dated December 22, 2004  
Reply to Office Action of September 22, 2004

cysteine units. This change to independent claim 1 was made in view of the Examiner's request that claim 1 include a proper sequence identifier.

Claims 1-8 remain pending in this application.

Claim 1 stands objected to as reciting sequences that lack proper sequence identifiers, e.g. SEQ IN NO:.

In response to this objection, claim 1 has been amended to recite that the peptide sequence of claim 1 corresponds to the fourth peptide of peptides of GeneBank LocusID: 4018 which are separated by cysteine units. Note, as indicated in applicants' specification, the DNA sequence encoding AK38 protein has been registered in the GeneBank under access number AY039748 and subsequently assigned GeneBank LocusID: 4018.

This recitation is believed to properly identify applicants' claimed peptide in a manner that is sufficient to enable one skilled in the art to practice applicants' claimed invention.

Entry of the changes to the claims is respectfully requested.

Claims 1, 2, 5 and 6 stand rejected under 35 U.S.C. §102(b) as being anticipated by International Publication No. WO 99/36784 to Kundu et al.

Claims 1, 2, 5 and 6 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,210,906 to Kundu et al.

On page 3 of the Official Action the Examiner objected to claims 3, 4, 7 and 8 as being depending from rejected claims.

Appl. No. 09/927,006  
Response, Dated December 22, 2004  
Reply to Office Action of September 22, 2004

For the reasons set forth below, it is submitted that all of the pending claims are allowable over the prior art and therefore, the outstanding rejections of the claims should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

Both WO 99/36784 to Kundu et al. and U.S. Patent No. 6,210,906 to Kundu et al. are based upon the same priority document.

Each Kundu et al. reference (collectively referred herein to as Kundu et al.) is directed to specific antibodies that can be used to assay samples for Kringle 5 of lipoprotein(a) (Apo(a)).

In contrast, the present invention is directed to a peptide that forms only a portion of the 38<sup>th</sup> Kringle of Apo(a), which applicants have discovered demonstrates anti-angiogenic activity.

The Examiner states that each of the Kundu et al. references "teaches a sequence that comprises the anti-angiogenic functionality of the structure of sequence {4} (see SEQ ID NO: 1)."

However, SEQ ID NO: 1 of Kundu et al. is for the entire Kringle 5 of Apo(a) as disclosed in Kundu et al.

Kundu et al. do not teach or suggest or provide any reason to isolate any particular protein from Kringle 5 of Apo(a). All Kundu et al. is concerned about is assaying samples for the presence of Kringle 5 of Apo(a).

Accordingly, Kundu et al. does not anticipate applicants' claimed invention.

Applicants' invention is based upon their discovery that certain peptides of the 38<sup>th</sup> Kringle of Apo(a) provides anti-angiogenic activity.

Appl. No. 09/927,006  
Response. Dated December 22, 2004  
Reply to Office Action of September 22, 2004

Kundu et al. does not even provide any reason or suggestion that supports any desirability to isolate or purify or even specifically identify any particular peptide from Kringle 5 of Apo(a).

The Examiner's statement that each of the Kundu et al. references "teaches a sequence that comprises the anti-angiogenic functionality of the structure of sequence {4} (see SEQ ID NO: 1)" is misleading. Kundu et al. completely fails to mention anti-angiogenic functionality (as the Examiner's statement indicates or implies), or any reason to separately identify and distinguish applicants' claimed peptide or any peptide from Apo(a), or any reason to purify or isolate any particular peptide from Apo(a).

The Examiner will note that SEQ ID NO: 1 listed by Kundu et al. is different from GeneBank LocusID: 4018 so that the first peptides are not the same.

Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §102 as anticipating applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding rejections of the claims should hence be withdrawn.

Appl. No. 09/927,006  
Response. Dated December 22, 2004  
Reply to Office Action of September 22, 2004

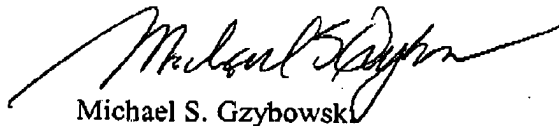
Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



Michael S. Gzybowski  
Reg. No. 32,816

BUTZEL LONG  
350 South Main Street  
Suite 300  
Ann Arbor, Michigan 48104  
(734) 995-3110

121581.1